

*Attorney Docket OHG 135***IN THE CLAIMS**

1. (currently amended): A method for maintaining a clean surface of a semiconductor substrate, prior to a subsequent high-temperature wafer processing step involving a high temperature of heat treatment, comprising, in sequence:

washing the semiconductor substrate so as to make the surface clean; ~~[[and]]~~

depositing a high molecular-weight straight-chain organic compound, having a boiling point lower than the high temperature of heat treatment of the wafer processing ~~of the subsequent step~~, onto the clean surface of said semiconductor substrate ~~during or after washing of said semiconductor substrate~~;

leaving the substrate to stand in air containing ambient organic substances, the air being at a low temperature lower than the boiling point; and

performing the high-temperature step;

wherein the ambient organic substances are prevented from adsorbing onto the cleaned surface of the substrate, prior to the high-temperature step, by the high molecular-weight straight-chain organic compound.

2. (currently amended): The semiconductor substrate surface protection method according to claim 1 wherein said high molecular-weight straight-chain organic compound is selected from substances of ~~lower~~ boiling point lower than 500°C.

3. (currently amended): The semiconductor substrate surface protection method according to claim 1 wherein said high molecular-weight straight-chain organic compound is a compound of a single type.

4. (currently amended): The semiconductor substrate surface protection method according to claim 1 wherein said high molecular-weight straight-chain organic compound is cholesterol ($C_{27}H_{46}O$).

5. (currently amended): The semiconductor substrate surface protection method according to claim 1 wherein said high molecular-weight straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

6. (currently amended): The semiconductor substrate surface protection method according to claim 1 wherein, after deposition of said high molecular-weight straight-chain

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organic compound onto the clean surface of the semiconductor substrate, said high molecular-weight straight-chain organic compound is further eliminated by the heat treatment temperature.

7. (currently amended): A method for maintaining a clean surface of a semiconductor substrate, prior to a subsequent high-temperature wafer processing step involving a high temperature of heat treatment, comprising, in sequence:

washing the semiconductor substrate so as to make the surface clean; [[and]]

depositing a high molecular-weight straight-chain organic compound, having a boiling point lower than the high temperature of heat treatment of the wafer processing of the subsequent step, onto the clean surface of said semiconductor substrate by spin coating in which liquid containing the high molecular-weight straight-chain organic compound and pure water is discharged from a spray nozzle while rotating the semiconductor substrate ~~during or after~~ washing of said semiconductor substrate;

leaving the substrate to stand in air containing ambient organic substances, the air being at a low temperature lower than the boiling point; and

performing the high-temperature step;

wherein the ambient organic substances are prevented from adsorbing onto the cleaned surface of the substrate, prior to the high-temperature step, by the high molecular-weight straight-chain organic compound.

8. (currently amended): The semiconductor substrate surface protection method according to claim 7 wherein said high molecular-weight straight-chain organic compound is selected from substances of boiling point lower than 500°C.

9. (currently amended): The semiconductor substrate surface protection method according to claim 7 wherein said high molecular-weight straight-chain organic compound is a compound of a single type.

10. (currently amended): The semiconductor substrate surface protection method according to claim 7 wherein said high molecular-weight straight-chain organic compound is cholesterol ($C_{27}H_{46}O$).

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11. (currently amended): The semiconductor substrate surface protection method according to claim 7 wherein said high molecular-weight straight-chain organic compound is behenic acid ($C_{21}H_{43}COOH$).

12. (currently amended): The semiconductor substrate surface protection method according to claim 7 wherein, after deposition of said high molecular-weight straight-chain organic compound onto the clean surface of the semiconductor substrate, said high molecular-weight straight-chain organic compound is further eliminated by the heat treatment temperature.

13.-18. (canceled)

19. (currently amended): The semiconductor substrate surface protection method according to claim 1, wherein the subsequent high-temperature step includes one of thermal oxidation and reduced pressure CVD.

20. (currently amended): The semiconductor substrate surface protection method according to claim 1, wherein the step of leaving the substrate to stand in air comprises comprising keeping the substrate in a clean room containing ambient organic compounds having a molecular weight lower than that of the high molecular-weight straight-chain organic compound.

21. (currently amended): The semiconductor substrate surface protection method according to claim 7, wherein the subsequent high-temperature step includes one of thermal oxidation and reduced pressure CVD.

22. (currently amended): The semiconductor substrate surface protection method according to claim 7, wherein the step of leaving the substrate to stand in air comprises comprising keeping the substrate in a clean room containing ambient organic compounds having a molecular weight lower than that of the high molecular-weight straight-chain organic compound.

23. (currently amended): A method of keeping ambient organic compounds in [[a]] clean room air containing the ambient organic substances from adhering to an already cleaned semiconductor substrate, comprising

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uniformly depositing onto the substrate a straight-chain organic compound having a higher molecular weight than that of the ambient organic compounds, whereby adsorption of the ambient organic compounds is abruptly reduced;

wherein the straight-chain organic compound has a boiling point lower than a temperature of a heat treatment of a wafer-processing subsequent step, whereby the straight-chain organic compound is not left behind as a residue on the substrate.

24. (previously presented): The method according to claim 23, wherein the straight-chain organic compound does not contain unsaturated bonds.

25. (previously presented): The method according to claim 23, wherein the straight-chain organic compound comprises a single straight-chain organic compound.

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